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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,656	01/16/2004	Raymond Hauser	36400.18US10	8031

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EXAMINER

KIM, CHONG HWA

ART UNIT PAPER NUMBER

3682

DATE MAILED: 02/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,656

Applicant(s)

HAUSER ET AL.

Examiner

Chong H. Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/2/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5 and 13 recite the limitation "the input shaft" in lines 2 and 1 respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7, 10, and 14-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimizu et al., U.S. Patent 5,836,159.

Shimizu et al. shows, in Figs. 1-4, and 23, an axle driving apparatus, comprising;

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a first housing member 1' and a second housing member 72 joined to the first housing member along a joint surface (see Fig. 23) to form a sump;

a center section 5 mounted in the sump and comprising a pump running surface and a motor running surface formed generally perpendicular to the pump running surface;

an axial piston pump 12 positioned on the pump running surface and an axial piston motor 13 positioned on the motor running surface;

a thrust bearing 37 mounted in the sump and engaged to the axial piston motor, wherein the center section is located entirely between the joint surface and the thrust bearing;

a motor shaft 4 engaged to and driven by the axial piston motor and an axle shaft 7 driven by the motor shaft, wherein the axes of the motor shaft and axle shaft are generally parallel and wherein the longitudinal axis of the motor shaft is generally perpendicular to the joint surface;

a gear train 20-25 mounted in the sump and driven by the motor shaft and at least one axle engaged to and driven by the gear train, wherein the longitudinal axis of the axle is parallel to the longitudinal axis of the motor shaft;

a pump shaft 3 drivingly engaged to the pump wherein the pump shaft is generally perpendicular to the axle shaft;

a swash plate 11' (see Fig. 23) engaged to the axial piston pump and having an axis of rotation that is generally parallel to the longitudinal axis of the motor shaft;

wherein the swash plate axis of rotation, the input shaft axis of rotation and the motor shaft axis of rotation are generally co-planar;

wherein the swash plate comprises a first trunnion 11'a rotatably mounted in the first housing member and a second trunnion 11'b rotatably mounted in the second housing member;

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wherein the first and second trunnions are integrally formed on the swash plate;

wherein the center section, axial piston motor, the axial piston pump and thrust bearing are located between the joint surface and an interior surface of one of the housing members;

a thrust bearing (see Fig. 23) positioned within the swash plate and engaged to the axial piston pump, wherein the thrust bearing is located between the joint surface and an interior wall of one of the housing members; and

wherein the motor shaft is positioned on one side of the pump running surface and the swash plate axis of rotation is positioned on the opposite side of the pump running surface.

5. Claims s 1-5, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohashi, U.S. Patent 5,339,631.

Ohashi shows, in Figs. 1-2, an axle driving apparatus, comprising;

a first housing member 1 and a second housing member 2 joined to the first housing member along a joint surface to form a sump;

a center section 3 mounted in the sump and comprising a pump running surface and a motor running surface formed generally perpendicular to the pump running surface;

an axial piston pump 5 positioned on the pump running surface and an axial piston motor 6 positioned on the motor running surface;

a thrust bearing 8a mounted in the sump and engaged to the axial piston motor, wherein the center section is located entirely between the joint surface and the thrust bearing;

a motor shaft 12 engaged to and driven by the axial piston motor and an axle shaft 22 driven by the motor shaft, wherein the axes of the motor shaft and axle shaft are generally

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parallel and wherein the longitudinal axis of the motor shaft is generally perpendicular to the joint surface;

a pump shaft 11 drivingly engaged to the pump wherein the pump shaft is generally perpendicular to the axle shaft;

a swash plate 7 engaged to the axial piston pump and having an axis of rotation that is generally parallel to the longitudinal axis of the motor shaft;

wherein the swash plate axis of rotation, the input shaft axis of rotation and the motor shaft axis of rotation are generally co-planar;

wherein the center section is attached to the first housing member by means of fasteners 13-15 that are generally perpendicular to the joint surface; and

wherein the center section comprises fastener openings located on a portion of the center section generally parallel to and offset from the motor running surface.

Allowable Subject Matter

6. Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

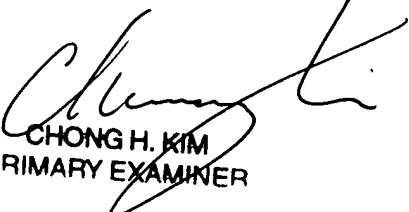
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (703) 305-0922. The examiner can normally be reached on Tuesday - Friday; 8:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

chk
January 28, 2005


CHONG H. KIM
PRIMARY EXAMINER